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Combining Science with Business in a Large Biotech Setting

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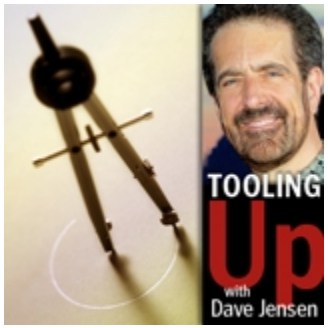
Agenda/Learning Objectives

- Personal Journey from Lab to Industry
  - Key Things I did to make the transition
  - Challenges Faced
- Defining Product Management
  - What does it mean to ‘Combine Science with Business’ and to be a Product Manager?
  - Type of Training/Skills Required
  - What’s it like to work in Big Biotech as a Product Manager?
    - Typical Day/Interactions with Other Departments
- Common Paths
  - What can you do to make the transition? (entry level careers)
  - How can you find a position that is right for you?
- The Importance of Networking
- Resources

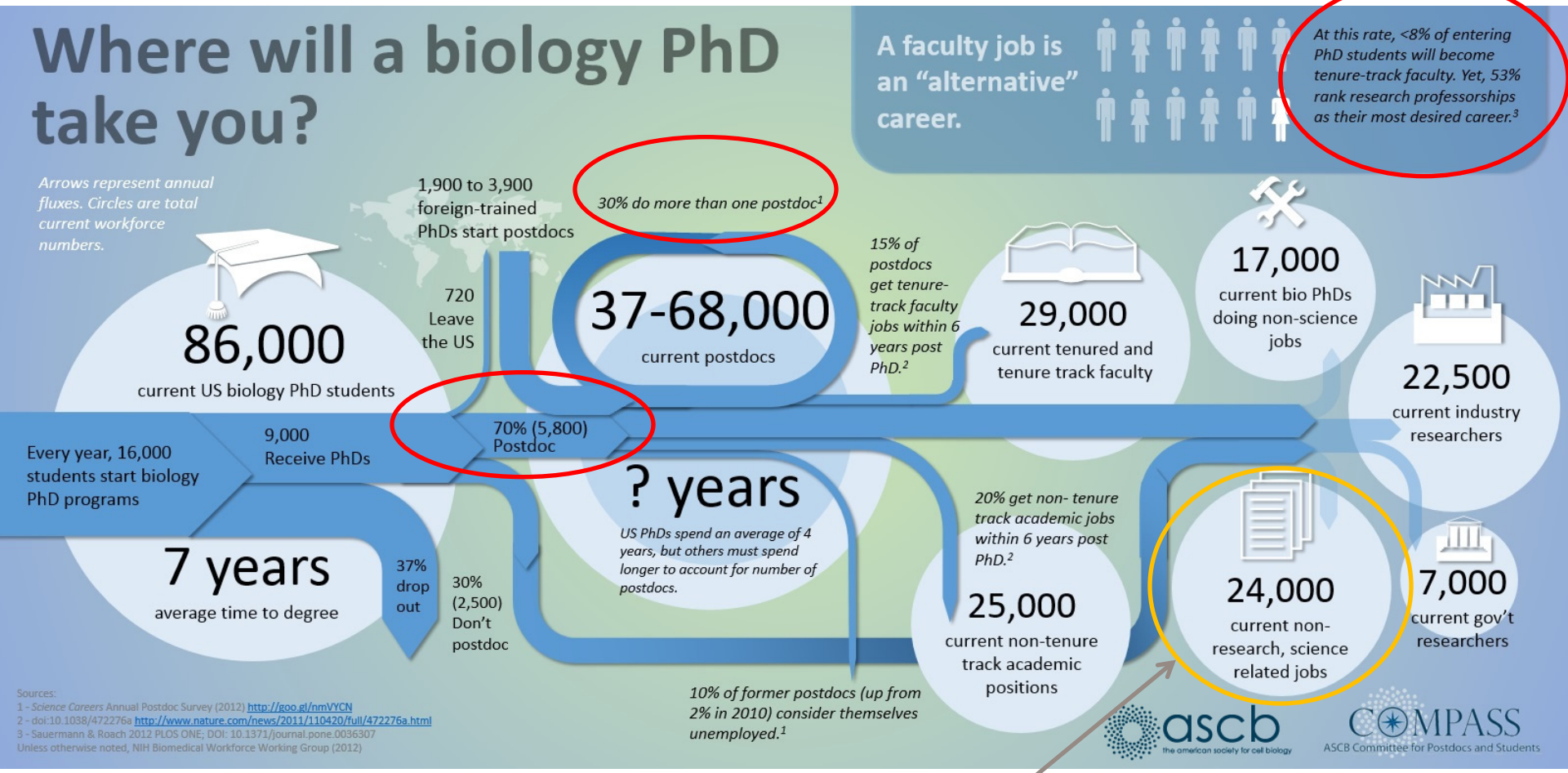
Personal Journey: Time for Action

"But not everyone wants to wade through several more years of shake flasks and pipettors, in hopes that serendipity and networking will eventually lead to where they want to be. Many are more comfortable taking steps — now — that keep their options open but help them move toward the career they want to end up in."

~Dave Jensen



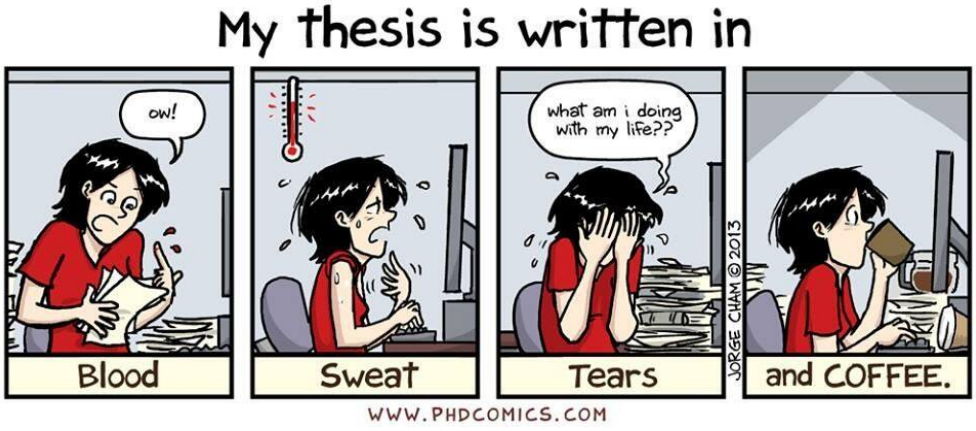
Many Options Beyond a Post-Doc



*You can end up here instead right off the bat

Personal Journey: What I Realized

- No one is going to seek you out. You have to go and find and/or create opportunities yourself.
- I did not want to do a postdoc as I didn't want to stay in academia and be a bench scientist
- I needed a career that allowed me pursue my passion for science (and use my science background/expertise) but also in a business setting.



Some of the best and most crucial opportunities for your long-term career lie outside of lab

What did I do outside of lab?

- You MUST do things outside of lab (Examples):
  - Run a **side-business** (Started one in 2009 and 2012-current)
  - Run a **professional blog** (Started in 2012-current)
  - **Consult** (2012-2013- social media/adwords consulting)
  - Audit or take a **business class** on campus (Entrepreneurial management-2012)
  - Get involved in things **outside your field** of expertise (law, computer science, business, etc)
  - **Write** a book (Wrote one in 2012, Second in 2013)
  - **Network** continuously with industry professionals and stay in contact (75 informational interviews which led to a network of 200+ contacts in under a year)
  - Write a **business plan** or get involved in **entrepreneurship**
  - **Internship** in Industry during PhD studies

More at: http://thegradstudentway.com/blog/?p=1601

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How I Landed An Internship and Skipped the Postdoc

- 75 **Informational Interviews** from 2012-2013 spanning Field Application Scientist, CEOs, Product Managers, Scientists, Sales Reps, Consultants, etc.
- **Do as many as it takes** to get that ONE PERSON to really notice you, chances are an opportunity may open up
- Promega created an internship position in Marketing: Worked 20/hrs a week and did my PhD studies 40-60 hrs/a week for 8 months
- The experience from this internship landed me the job I have now at MilliporeSigma as a Global Product Manager straight out of graduate school

Challenges/Difficulties

Challenges/Difficulties

- **Telling my PI** I was going to leave academia and the bench
- Finding a great company that fit me with a **cutting-edge, growing product line** to manage
- **Very competitive**: At end of internship, relocated to St Louis due to saturated market
- **Lengthy interview process** (can last up to 30 days)
- **Balancing** an internship at the same time as a PhD (thesis writing, experiments, etc) and running a side business
- **Gaining** the needed **business skills** to not look like just a bench scientist (this does NOT happen overnight)
- **Networking** and meeting the right people and being very proactive (this takes a lot of TIME and PATIENCE). Focus on adding value back.
- **Hit the Ground Running**: Learning the new culture and feel of industry, creating a reputation at a new company, finding who my “go-to” people are.

Why I Picked Product Management

- The product that you 'own' or manage could also be a science-based product that relates directly to your thesis work or prior hands-on experience (for me it was RNAi).
- **Your day will never be boring**.
- Being a product manager is a lot like being an **entrepreneur**, where you can create new products and drive to market.
- **My strengths and interests lied outside of lab**: I wanted a position that combined both business and science together.

Why I Picked Industry: A lot of Benefits and Opportunities

- **The work matters**: Bring new treatments to patients with life-threatening diseases around the world
- **Your products help people**: You will see a more 'immediate' effect from your work as you watch your product's creation and launch into the market (ex life science reagents)
- **You're focused and have a supporting team:** You have a job to do and you have a pool of resources to do it. Things move fast. You can focus on solving problems.
- **The environment is awesome**: Working in a dynamic, cross-functional team (well-rounded), wear different hats.
- **Highly rewarding**: Wide-variety of opportunities for career growth and change

"You actually see how science plays out in real life and is used to produce products that can help people"

What Is Product Management?

- Someone who identifies a 'Real' Scientific Problem, creates a product to solve that problem, and uses marketing to promote the growth of that product
- **Product Management is Marketing and not Sales**
  - Product Management: Create a new shoe line (Sizes 6-12)
  - Sales: Sell a specific shoe size to customers (i.e. Size 6)
  - Marketing: Reach specific markets through various channels (advertising, web, sales team, product promotions, etc) to sell all shoe sizes that fits the customer's needs and solves their problem

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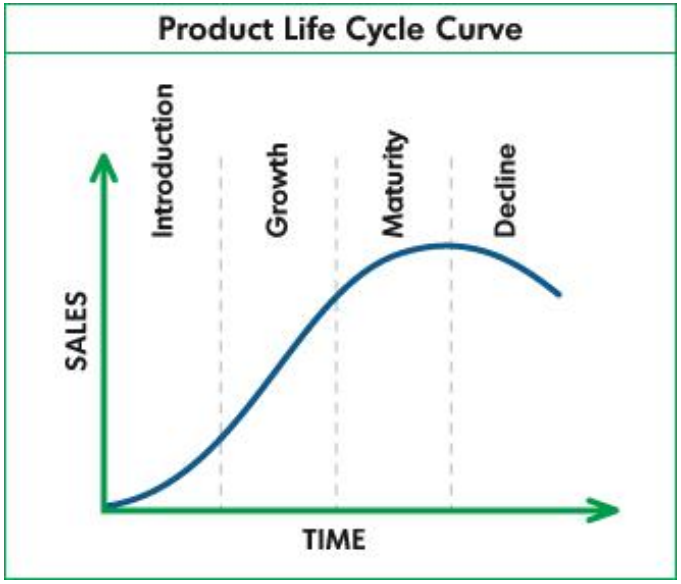
Successful Product Management

- *It is your job to lead by influence, find who the go-to person is and assemble the 'right' teams. You must learn how to read the market and know where to take your product in the future and fend off competition.*



Do you Need a PhD to Be a Product Manager?

A PhD Will Give You a Huge Leg Up

- A PhD is not ‘required’ but will dramatically help you, as your scientific training will be utilized on a daily basis and will play to your strengths.

- A PhD will improve your ability to understand and explain the science behind the brand or your product(s).

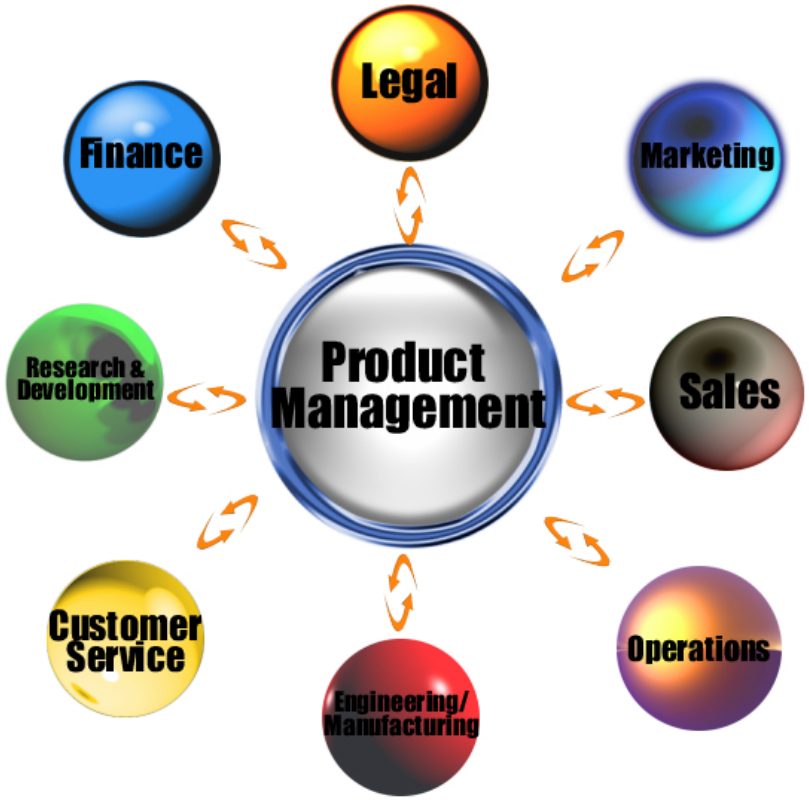
- Having a PhD will give you more credibility with customers and key opinion leaders, and can add tremendous value to your marketing team.

Skills that will help you succeed as a Product Manager

- Creative, analytical, or critical thinking
- Entrepreneurial spirit
- Very technical understanding of science and ability to effectively communicate
- Customer-focused mindset
- Team work
- Leadership (lead by influence, motivate teams)
- Calm under pressure
- Good writing skills
- Effective time management, project management, and ability to balance competing priorities
- Strategic thinker (ability to think ahead instead of just focusing on the now)
- Budgeting
- Patent Law, creating business plans, financial analysis, etc.

Why Product Management is a Fun and Exciting Career: Variety

- As a product manager, you will work across many different areas and disciplines
- Each day is a new challenge.



Example: Product Management to R&D

1. **R&D to PM:** R&D helps do early development work on the product, perform product testing, provide technical data and assess viability of product, determine if scientifically sound, improve product as needed.

2. **PM To R&D:** Product Management will use scientific expertise and knowledge to communicate product needs effectively, defend answers, defend resources needed and work that needs to be done, and effectively drive the product forward based on market needs.

Example: Product Management to Sales

1**. PM to Sales:** Product Management creates sales collateral, sales promotions, conducts sales training, and offers sales support (conference calls, emails, etc)

2. Sales to PM: Sales comes to Product Management for Technical Support, to discuss customer needs and give ideas, ask pricing questions

Example: Product Management to Operations/Manufacturing

1. **Operations to PM:** Tests product in manufacturing to determine how long product will take to make, how much it will cost, also provides performance data, create new protocols, packaging, and labeling. Scaling up manufacturing.

2. **PM To Operations:** Based on customer needs will define what Manufacturing will be making (specifications) and will justify answer (usually based on revenue or perceived value).

Example: Product Management to Tech Support

1. **Tech Support to PM:** Informs PM about product complaints, issues, or concerns (to improve product). Seeks resolution for customers that raise a problem with product.

2. **PM To Tech Support**: Provide detailed technical support about product so that Tech Support can respond to customer in a timely manner. Keep customer as happy as possible.

How you can land an Industry Position as a Product Manager

- You have to learn **to talk and understand the language of industry**
  - **Focus is the customer** and helping them solve a scientific problem
  - **Know the skills** that are relevant for the job you are applying (be able to give examples/stories of how you have demonstrated this already)
- You have to **lose the sense of entitlement**
  - Just because you have a PhD and 5 first author publications in Nature this doesn't guarantee you a job.
- You have to **stop looking like an academic**
  - Academics tend to focus on CV accomplishments and less on skills they learned in grad school that industry actually cares about
- Focus on the value that you can add to a company from Day 1
- Skip HR. Connect with someone who is the hiring manager or will get you to the hiring manager. NETWORK.
- Polished resume and LinkedIn Profile Ready To Go at all times
- Gain necessary skills outside of academia

The Road To Product Management: Make The "Double Jump"

1) PhD Student → *Intern → **Product Manager**

*Gain Industry Experience
*Gain Business Experience

Jump 1: Academia to Industry
Jump 2: Science to Business

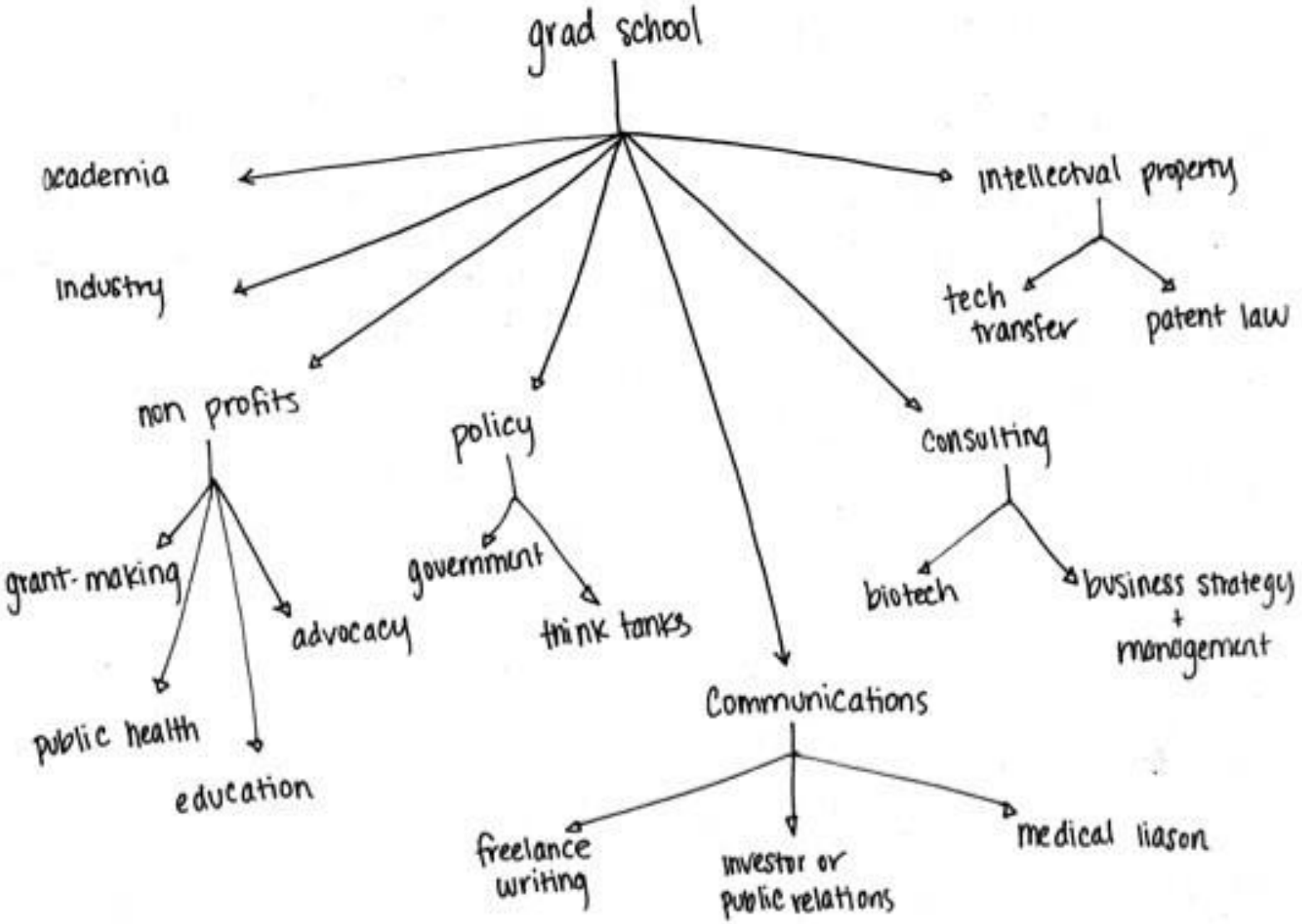
2) **PostDoc/Scientist → Technical Service Scientist / Bench Scientist → **Product Manager**

Harder jump

Faster path → Product Specialist / Associate Product Manager → **Product Manager**

**Industry will hire you typically based on what you did last

Other Types of Careers



Statistics That Should Concern You

- **44% of people surveyed ONLY have a network between 5 and 15 people!** That's almost half!
- **Only 13%** of those surveyed **have done three or more informational interviews! More strikingly, a whopping 54% have never even done an informational interview**
- **86% of those surveyed already have a LinkedIn Profile But Most Likely Don't Know How to Use It**
- **And, only 18% have a Professional Website and Only 2% have a Professional Blog**

*2013 Survey at Stanford 500+ students

More at: http://www.dougsguides.com/ready_analysis

Top 10 Ways To Effectively Network

1. **Talk to your professors**.
2. Attend live networking events or "happy hours".
3. Go to scientific conferences.
4. Start doing more informational interviews via introductions through LinkedIn or branching out from your existing network.
5. Attend career fairs, product shows, recruitment events, seminars, etc.

More at: http://thegradstudentway.com/blog/?p=548

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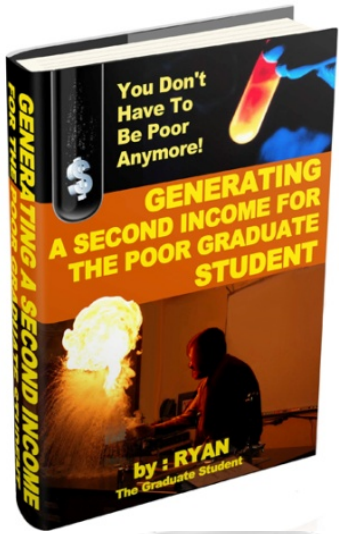
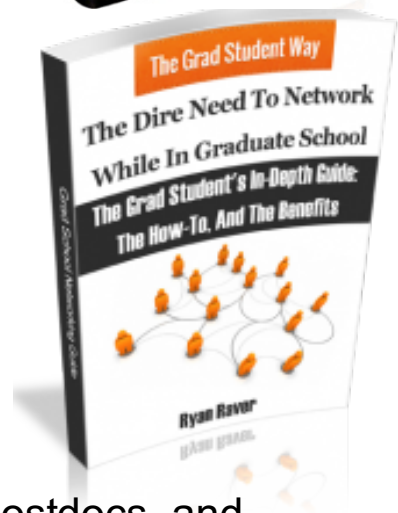
Top 10 Ways To Effectively Network

6. Connect with someone who better at networking than you.
7. Audit classes on campus.
8. Talk to those interested in entrepreneurship and possibly starting their own company.
9. If you can't do face-to-face interviews, connect with that distant (interesting) person over the phone.
10. Give presentations, be a guest speaker, and put yourself out there.

Grad School Resource: The Grad Student Way





Founder of TheGradStudentWay.com (2012) which helps PhD students, postdocs, and scientists transition into careers outside of academia based on practical solutions

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- Feel free to reach out about networking advice, resume help, grad school solutions, or career development
- Resources:
- Career Opportunities in Biotech and Drug Develop
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- PhD Careers Outside of Academia
- Versatile PhD